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## **ABSTRACT OF THE DISCLOSURE**

A method and apparatus for signal transmission via a radio interface in a radio communications system in which a radio channel is assigned for signal transmission between a first and a second radio station. A signal is first transmitted via a minimum of two transmission paths. Subsequently, a characteristic value relating to the transmission conditions on the radio interface is determined for each of the transmission paths. A control signal is then derived based on a comparison of the characteristic value among the transmission paths. Subsequently, based on this control signal the optimal transmission path is selected for the upcoming signal transmissions.